## **Abstract of the Disclosure**

A new algorithm for clock offset estimation for resources distributed across a network (such as the Internet). By exchanging a sequence of time-stamped messages between pairs of network nodes and separately estimating variable delays for each message direction, present inventive embodiments provide estimates for clock offset between node pairs and the bias of such estimates, thereby to permit more accurate correction. Present inventive algorithms operate in a variety of peer and server network configurations while providing significant improvement in convergence speed and accuracy.